

MUSICIANS OF MARS IN THE DEEP ATTACK: NOISE OR HARMONY?

**A MONOGRAPH
BY
Major James L. Miller
Field Artillery**



**School of Advanced Military Studies
United States Army Command and General Staff
College
Fort Leavenworth, Kansas**

First Term AY 96-97

Approved for Public Release Distribution is Unlimited

DTIC QUALITY INSPECTED 3

19970506 024

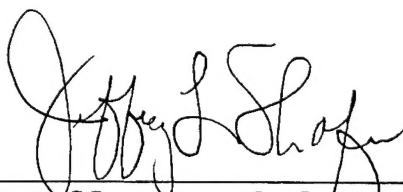
SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major James L. Miller

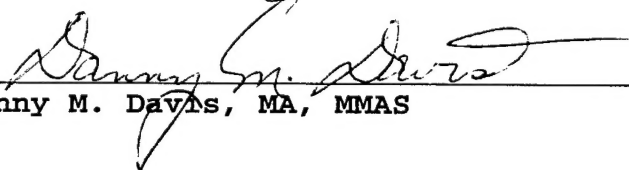
Title of Monograph: *Musicians of Mars on the Deep Attack: Noise
or Harmony*

Approved by:



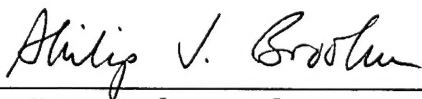
LTC Jeffrey L. Shafer, MMAS

Monograph Director



COL Danny M. Davis, MA, MMAS

Director, School of
Advanced Military
Studies



Philip J. Brookes, Ph.D.

Director, Graduate
Degree Program

Accepted this 20th Day of December 1996

| REPORT DOCUMENTATION PAGE | | | Form Approved OMB No. 0704-0188 | |
|--|--|--|---|---|
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. | | | | |
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE | | 3. REPORT TYPE AND DATES COVERED MONOGRAPH |
| 4. TITLE AND SUBTITLE <i>MUSICIANS OF MARS IN THE DEEP ATTACK: NOISE OR HARMONY?</i> | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) <i>MAJOR JAMES L. MILLER</i> | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies Command and General Staff College Fort Leavenworth, Kansas 66027 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Command and General Staff College Fort Leavenworth, Kansas 66027 | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES | | | | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED. | | | 12b. DISTRIBUTION CODE | |
| 13. ABSTRACT (Maximum 200 words) <i>See Attached</i> | | | | |
| 14. SUBJECT TERMS <i>Deep attack, Deep Battle, Division Deep operations, TASK ORGANIZATION</i> | | | 15. NUMBER OF PAGES <i>50</i> | |
| 17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED | | | 16. PRICE CODE | |
| 18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED | | 19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED | | 20. LIMITATION OF ABSTRACT UNLIMITED |

ABSTRACT

MUSICIANS OF MARS IN THE DEEP ATTACK: NOISE OR HARMONY? by MAJ James L. Miller, USA, 42 pages.

This monograph presents a new concept of division deep battle characterized by decentralized planning and execution by task organized, combined arms brigades instead of the current Deep Operations Coordination Cell (DOCC) method.

The study first argues that current division deep battle doctrine does not support the Army's doctrinal tenets of agility or initiative. The absence of these tenets significantly reduces the likelihood of success in the deep battle. The doctrine fails these tenets by ignoring the fundamentals of combined arms operations, by over-centralizing execution and planning in the DOCC, and by not establishing unity of command.

This monograph next examines similarities and contradictions in Army deep, close, and rear battle doctrine. Both close and rear battle doctrine emphasize decentralized execution of combat operations by task organized, combined arms units. On the other hand, deep battle doctrine relies on centralized execution using pure, non task organized, units.

Finally, four historical case studies show the weaknesses in current division deep battle doctrine and demonstrate the potential of decentralization and task organization. A case study from World War I and one from the US Army's Battle Command Training Program (BCTP) clearly demonstrate the capability of task organized deep battle units. A battle study from World War II and a second BCTP example illuminate the problems of over-centralization, failure to task organize, and lack of unity of command.

The study concludes that the best concept for division deep battle is a decentralized approach using task organized brigades. The division should task organize a brigade with all the necessary assets for successful completion of the deep attack. The division should provide a mission, intent, and desired end-state and decentralize further planning and execution to the deep task force commander. This concept brings agility and initiative back into the division deep battle.

Musicians of Mars in the Deep Attack:
Noise or Harmony?

A Monograph
by
Major James L. Miller
Field Artillery

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

First Term

Approved for Public Release; Distribution is Unlimited

ABSTRACT

MUSICIANS OF MARS IN THE DEEP ATTACK: NOISE OR HARMONY? by MAJ James L. Miller, USA, 42 pages.

This monograph presents a new concept of division deep battle characterized by decentralized planning and execution by task organized, combined arms brigades instead of the current Deep Operations Coordination Cell (DOCC) method.

The study first argues that current division deep battle doctrine does not support the Army's doctrinal tenets of agility or initiative. The absence of these tenets significantly reduces the likelihood of success in the deep battle. The doctrine fails these tenets by ignoring the fundamentals of combined arms operations, by over-centralizing execution and planning in the DOCC, and by not establishing unity of command.

This monograph next examines similarities and contradictions in Army deep, close, and rear battle doctrine. Both close and rear battle doctrine emphasize decentralized execution of combat operations by task organized, combined arms units. On the other hand, deep battle doctrine relies on centralized execution using pure, non task organized, units.

Finally, four historical case studies show the weaknesses in current division deep battle doctrine and demonstrate the potential of decentralization and task organization. A case study from World War I and one from the US Army's Battle Command Training Program (BCTP) clearly demonstrate the capability of task organized deep battle units. A battle study from World War II and a second BCTP example illuminate the problems of over-centralization, failure to task organize, and lack of unity of command.

The study concludes that the best concept for division deep battle is a decentralized approach using task organized brigades. The division should task organize a brigade with all the necessary assets for successful completion of the deep attack. The division should provide a mission, intent, and desired end-state and decentralize further planning and execution to the deep task force commander. This concept brings agility and initiative back into the division deep battle.

I. INTRODUCTION

The army has a good 'track record' of fighting the close battle, maximizing systems in a joint environment to disrupt and defeat the enemy. Technological breakthroughs dictate that we now apply the same principles to the deep battle...

-Colonel Donald L. W. Kerr

US Army doctrine emphasizes the importance of fighting the enemy throughout the depth of his formation. Traditionally, US Army divisions have fought the enemy in the close, face to face, fight. However, this has changed significantly. New weapons have increased the division's ability to acquire, track, and attack the enemy at greater depth in the battle formation while simultaneously fighting at close range. Divisions now must synchronize the close fight with a deep fight directed at the enemy's rear to delay or destroy his timing and ability to mass. This deep capability allows a division to defeat the enemy more rapidly while protecting friendly forces from the enemy. As a result, deep battle has become a cornerstone of Army doctrine for successful operations.

Because deep battle is an operational cornerstone, it is essential that the Army has an adequate and proper deep battle doctrine. The purpose of this paper is to examine current deep battle doctrine with regard to the Army's doctrine for planning, coordinating, and leading division level deep battle.

This paper argues that division deep battle doctrine is inadequate when judged by the tenets of Army operations. It will conclude that divisions should task organize units and decentralize decision making to maximize agility and initiative in the conduct of deep battle. The doctrine for division deep battle

should change to reflect a system of planning and organizing more similar to close battle doctrine.

The monograph is organized into six sections. Section I is this introduction. Section II will review deep battle theory and doctrine and explain combined arms warfare doctrine. This section sets the foundation for the monograph to allow a more complete understanding of the problem and its solutions. Section III will examine the current deep battle doctrine to point out flaws in planning and command and control (C2) procedures. Section IV will present the author's theory of division deep attack as a solution to these flaws. Section V will examine case studies to test the validity of the theory. Finally, Section VI is the conclusion and recommendations for changes in current doctrine.

As stated earlier, this monograph is about doctrine. "The (US) Army's doctrine lies at the heart of its professional competence."¹ Doctrine is an authoritative guide to how the US Army conducts war. Although it is authoritative, it remains adaptive enough to allow for changing and diverse situations. It incorporates lessons from past operations and describes how basic principles of war are applied to the conduct of future wars. Doctrine gives the US Army a common approach to all operations and is the basis for Army training. Simply stated, the Army relies on doctrine.²

The Army's basic operations doctrine is found in Field Manual 100-5, Operations. It is the foundation for all US Army doctrine. FM 100-5 lists five tenets, or basic truths, that describe characteristics of successful operations that are important to this paper. These tenets are initiative, agility, depth,

synchronization, and versatility. Each of these tenets has implications for deep operations. First, initiative implies getting the upper hand on the enemy, forcing him to react to the friendly unit's actions. It also applies to individuals and describes their willingness to seize opportunities and act independently within the commander's intent. In deep operations, units gain initiative by planning and acting faster than the enemy. Army forces must detect and attack enemy targets before they move or enter into the close battle. By doing this, the commander sets the conditions in which the close fight will occur. At the individual level, soldiers must be able to act rapidly, independently, and correctly without always requesting guidance from a higher commander. This independent action helps to maintain the initiative.³

The second tenet, agility, is the ability to act faster than the enemy and allows a unit to maintain initiative. Agile units make decisions faster than the enemy and create conditions that quickly overcome his ability to react. In deep operations, agile units exercise initiative and have the organization and systems in place to conduct decisive operations rapidly. Agile units are well trained, adaptive, and capable of swiftly planning new operations.⁴

Depth is the third tenet and it involves taking actions against the enemy throughout the battlefield. It includes attacking the enemy simultaneously in the front and rear, as well as, taking away his capability for future action. Actions in depth destroy the enemy's agility, disrupt his synchronization, and seize the initiative while guarding the friendly unit's

freedom of action. Depth shapes the battlefield and sets the conditions for success in the close fight. Deep attack is key to achieving depth on the battlefield.⁵

The fourth tenet, synchronization, is the ability to arrange the unit's activities in both time and space to achieve the desired effects against the enemy. It involves coordination of a multitude of varied and widespread events so that their net effects achieve the goal of the operation. In deep operations, synchronization is a complicated, but necessary, process. The coordination of numerous activities and events is essential to the success of deep operations. The synchronization requirements for deep operations are addressed later in this monograph.⁶

The last tenet, versatility, is the ability to shift focus rapidly to accomplish the tasks required for new missions or roles. It requires the capability to reorganize rapidly or tailor forces for new and completely different missions. In deep battle, versatility may involve rapidly restructuring a deep battle unit to participate in the close battle when needed.⁷

To provide some structure for applying these tenets and to explain the depth of the battlefield, FM 100-5 provides a battlefield framework. This framework breaks up combat activities into manageable pieces and gives the commander a way to organize the battle. FM 100-5 organizes these as close, rear, and deep operations or battles. Close operations are actions in direct contact with the enemy. The close battle is usually fought within the range of direct support artillery weapons. Rear operations are actions taken to preserve the Army's freedom of action and

provide for future operations, resupply, sustain the force, and provide battle command.⁸

Deep operations, the focus of this study, are actions directed against enemy forces not participating in the close battle. They are directed against the enemy's rear to eliminate his artillery capabilities, disrupt his ability to command and control his forces, destroy his ability to resupply and reinforce, defeat his reserves, and to ruin his morale. They may also attack an approaching enemy force to limit its ability to reinforce or exploit the success of an enemy unit in the close battle. Deep operations take away the enemy's freedom of action and set the conditions for future decisive actions.⁹

To understand the magnitude of deep battle, a more comprehensive explanation is necessary. US Army doctrine for deep battle relies on fires, maneuver, and leadership. Fires from long range precision artillery systems and Air Force bombers can achieve many deep objectives by destroying units, bridges, logistic sites, infrastructure, and equipment. Modern precision weapons, with their increased accuracy and lethality, often make fires the primary method of conducting deep battle. Deep maneuver has much potential but entails more risk than fires. Maneuver can be a ground attack that exploits a penetration or infiltrations deep into the enemy rear. Cavalry raids are historical examples of deep ground maneuver. Today, deep maneuver would more likely include aviation maneuver. A deep attack by the Army's AH-64 Apache attack helicopters is deep maneuver. It can also be a combination of ground and aviation maneuver. Typical examples are air assault and airborne operations. Finally, leadership is the

essential element of deep operations. Leadership provides the guidance and synchronization needed to maximize the effectiveness of the operation. It provides purpose, direction and motivation for the deep battle. Leadership combines the best mix of both fire and maneuver to gain the greatest possible results. The commander's personal influence and competence have direct bearing on the success of deep operations.¹⁰

Deep battle has constraints. Divisions conduct deep attack in a limited section of the battlefield. Normally the division will operate within an area of operations (AO) given to it by its higher headquarters, usually a corps headquarters. The corps sets the limits of the division's AO and may further restrict division level deep operations. The division further subdivides its AO into subordinate brigade sectors or AOs. Generally, the division conducts deep operations in the area from its brigades' forward boundaries to the division forward boundary. Ultimately, the range of its weapons and its ability to locate and track enemy forces limits the division's deep battle. The basic rule is; if the division can not influence an area through fire, maneuver, or leadership, it can not conduct deep operations there.

II. Theory and Doctrine

A review of deep attack theory and Army doctrine is fundamental to this monograph. Armies have conducted deep operations throughout history, but the Soviets were the first to develop a theory of deep operations.¹¹

Two army officers, Mikhail Tukhachevskii and Viktor

Triandafillov, developed the Soviet deep operations theory in the 1920s. They foresaw the possibilities of great technological change in the Soviet military and the need to develop a theory of war to exploit these new weapons. Although Triandafillov died in a plane crash in 1931 and Tukhachevskii was a victim of a purge in 1937, their influence was evident in the Soviet basic field regulations PU-29 (1929) and PU-36 (1936). PU-29 recommended using tanks to attack through a penetration and into the depth of the enemy's formation. This regulation moved Soviet doctrine from warfare on a broad front to a doctrine of deep battle. This emphasis on deep operations later became doctrine in PU-36 (field regulation of 1936).¹²

These Soviet theorists focused on deep operations through ground maneuver and fires. Triandafillov believed that fires and combat troops were interchangeable. The introduction of his concept of interchangeability became key not only to early Soviet operations, but to the tenet of agility in our modern concept of deep battle. Fires could accomplish the missions of maneuver units and visa versa. Both Soviet theorists saw the potential for advances in technology to increase artillery ranges, accuracy, and lethality. This promise of new technology allowed them to focus on even deeper applications of combat power through interchangeability. Although the Soviet deep theory allowed selection of the best means to accomplish the deep battle mission, Soviet theorists favored a combination of ground maneuver and fires because technology did not yet support the concept of true interchangeability.¹³

Tukhachevskii applied Triandafillov's ideas and created a

doctrine of deep operations in regulation PU-36 that allowed the Soviet army to attack its enemy at several points in depth simultaneously. This Soviet doctrine relied on specially trained and organized long range tank (DD tank) units to penetrate enemy front lines and rapidly attack deep into the enemy rear. The DD tank units were combined arms formations equipped with tanks, tracked anti-tank guns, engineers, artillery, and infantry. The Soviets, realizing initiative created speed, allowed the DD tank unit commander to exercise initiative in the execution of the deep operation.¹⁴ The Soviet Field Regulation PU-36 listed the mission of DD tank units very clearly.

The task of the long-range (DD) tank groups is to penetrate to the depth of the main enemy defense, disrupt his reserves and headquarters, destroy his main artillery group, and cut the axis of withdrawal of his main force.¹⁵

With this doctrine, Tukhachevskii and Triandafillov laid the groundwork for the great success of the Soviet Army in World War II. Successful operations like the Soviet's 1944 Belorussian operation (Operation Bagration) were made possible by this doctrine. This doctrine of deep battle also led to the creation of the Soviet Operational Maneuver Group (OMG) of the Cold War. Curiously, the Soviet application of deep battle and the OMG to the Cold War would set the stage for the US Army and NATO to create a western approach to deep battle.

In the early 1980s, NATO faced an overwhelming and numerically superior enemy in the Warsaw Pact. NATO needed a way to defeat a Warsaw Pact attack in a shallow defensive belt along

the inter-German border. Preferably, this defense would not need nuclear weapons or risk a major nuclear exchange and devastation of the European continent. Several individuals, notably Generals Donn Starry, Bernard Rogers, and F. M. Von Senger und Etterlin saw the answer in deep battle. Deep battle allowed NATO to gain the initiative and increase the depth of its defense by extending the battlefield through the depth of the Warsaw Pact formation. The increased range of modern weapons and acquisition systems allowed NATO to interdict Soviet follow on forces before they could join the battle while simultaneously defeating the enemy's lead units in the main battle area.¹⁶ As commander of the US Army's Training and Doctrine Command, General Starry brought the NATO theory of deep strike into US Army doctrine at levels from brigade to echelons above corps.¹⁷

The NATO and early US Army deep battle doctrine, unlike the Soviet model, focused primarily on defensive fires. While the Soviets still used a combination of ground maneuvers and fires, the NATO doctrine adopted Triandafillov's concept of interchangeability. The technological advances in the West and a paucity of ground maneuver forces led NATO to rely on airpower and fire support systems for deep operations. NATO fires, not maneuver, would achieve deep battle objectives. It was the revolution of advanced electronics, precision long-range weapons, and attack helicopters and the West's acceptance of this new technology that allowed NATO to fight deep using this concept of interchangeability.¹⁸

NATO deep strike doctrine focused on interdicting the enemy's

follow on forces as they advanced into combat. The goal was to delay or prevent the enemy follow on forces' arrival at the main battle area and to reduce their effect on the main battle once they arrived. In theory, this interdiction would allow NATO forces to defeat the Soviets piecemeal and create opportunities for NATO forces to counterattack, reconstitute the defense, or reinforce. NATO focused on attacking the enemy in depth with three tools: interdiction by air, artillery, and special operations forces; use of offensive electronic warfare; and through deception. NATO leaders saw likely interdiction targets as logistics facilities and units, communications sites, and assembly areas for enemy combat forces.¹⁹

The NATO generals understood the complexity of simultaneous operations against the enemy and understood the many problems created by the range and capabilities of their new weapon systems. Because of this, they focused on the means necessary to synchronize, command, and control the deep strike. Especially important was their emphasis on the commander's role in setting targeting priorities for the use of limited deep strike assets. The NATO generals saw the necessity of creating targeting teams at command posts to assist the commander in selecting, prioritizing, and coordination the attack of deep strike targets. These targeting teams, formed on the fire support elements, set a precedent for future US Army deep operations doctrine. Fire support elements would command and control deep fires. NATO also saw the need for advanced command and control and weapon systems to maximize deep strike doctrine.²⁰

The combination of ten years of experience with deep attack

and the fielding of new weapons systems has allowed the US Army to modify the NATO doctrine of deep strike. Systems such as the AH-64 Apache attack helicopter and the Army's Tactical Missile System (ATACMS), as well as numerous developments in target acquisition and automated fire direction, created new possibilities for deep attack. These advances, along with experience in combat and in computer simulations, have refined Army doctrine for deep battle to look more like a compromise between the Soviet and NATO doctrines.

The US Army's modification of NATO doctrine relies on interchangeability to gain agility. Combat aviation brigades or ground units can maneuver to attack deep targets or modern precision weapons can destroy them. The Army doctrine allows commanders to select the best means or combinations of means for deep attack. At the same time, the Army sees the purpose of deep battle more along the lines of the Soviet DD tank groups' mission.

US Army Field Manual (FM) 100-5, Operations (1993) describes current Army doctrine on deep battle in terms of not only interchangeability but also as a combination of both fire and maneuver. The objective of deep operations is to attack committed and uncommitted enemy forces and artillery to take away the enemy's ability to react to the close battle. FM 100-5 focuses on the requirement to integrate joint assets into deep operations. Like the NATO generals, FM 100-5 emphasizes the requirement for the commander to synchronize the close and deep battle and to prioritize and integrate assets. The commander is responsible for ensuring unity of effort in his command so all assets are directed at achieving the most beneficial result through deep operations.²¹

Field Manual 71-100, Division Operations applies Army deep battle doctrine from FM 100-5 to division deep battle. The 1994 edition of FM 71-100 takes deep operations a step further than FM 100-5 and states that "...deep attacks may be completely decisive by themselves or secure advantages for the division commander in his current or future engagements."²² Since the objective of deep attacks at division level is to disrupt the enemy commander's plan, divisions focus on high payoff targets. High payoff targets are those enemy capabilities whose destruction gives the greatest benefit toward the completion of the division's mission. Like the Soviet doctrine, these high payoff targets are usually enemy fire support assets, reserves, and command and control sites. The priority for attacking these targets is then matched with the best weapon system to destroy, defeat, or neutralize each target. The result of this matching is the division attacks only the key targets with the best method of attack thereby gaining the greatest effect from limited assets.²³

As in FM 100-5, the division commander is responsible for prioritizing targets, and synchronizing and integrating attack means. However, FM 71-100 goes much further and calls for deep attack to be planned, synchronized, coordinated, and monitored by the division staff in the division's main command post. Each division main command post has a Deep Operations Coordination Cell (DOCC) responsible to the division commander for these actions. The DOCC, like the NATO deep targeting cell, is based on the fire support element and consists of personnel from the staff sections with a role in deep attack. FM 7-100 lists its primary members as the G2 and G3 staff officers, the division artillery commander,

and the aviation brigade commander. Other division staff officers and special unit representatives participate in the DOCC as required by the mission. Potential members include electronic warfare specialists, Air Force liaison officers, fire support coordinators, intelligence analysts, weather forecasters, and psychological warfare specialists. The DOCC operates under the direction of the division chief of staff as a permanent organization that comes together specifically for deep missions. FM 71-100 is careful to point out that although each member has other staff functions, the DOCC is not an ad hoc organization. Rather, it is a well-trained, permanent organization.²⁴

The DOCC can conduct deep battle in a number of ways. Divisions usually rely on lethal and non-lethal fires and maneuver to attack deep. Lethal fires are the fires of long range artillery systems and Air Force bombers. Non-lethal fires include electronic attack of enemy communications and other electronic systems. The division's primary means of conducting deep maneuver is through its two AH-64 equipped attack helicopter battalions. While FM 71-100 discusses both heavy and light forces conducting ground maneuver for deep attack, it also warns divisions about the risks of deep ground maneuver. In fact, almost all recent division deep attacks have relied solely on indirect fires and attack helicopter maneuver.²⁵

As stated earlier, division doctrine established the DOCC to plan, synchronize, coordinate, and monitor deep battle. In practice, it has become the command and control for deep attacks, and the executor. It synchronizes and executes the deep attack by directing the optimum weapon or unit to attack the target. This

is fairly easy when deep attack is conducted solely with indirect fires and relatively few systems. However, when helicopter maneuver is the means of deep attack, the DOCC faces a more complex problem of ensuring the proper coordination and synchronization of the many varied systems in the operation. Some of these assets include, but are not limited to; artillery, attack helicopter battalions, Air Force close air support, electronic warfare assets, intelligence gathering systems, special forces, and air defense weapons.²⁶

At this point, an example attack helicopter deep attack will clarify the division deep battle. The division is conducting a defensive operation. During the planning process, the division commander decides to conduct an attack helicopter deep attack against the highest payoff target in the enemy's formation. In this case, it is the enemy's follow on tank regiment. Through a deliberate planning process, the DOCC develops the deep attack plan to achieve the commander's desired result. Its members must consider available assets, the nature of the target, and the best time for execution. In determining the best time, they consider weather, available daylight or cover of darkness, and likely enemy actions. During planning, the DOCC begins synchronizing by assigning missions to subordinate units and ensuring their completion. The division artillery prepares to support the attack helicopter battalion by conducting suppression of enemy air defense (SEAD) along the attack route and in the deep target area. Division intelligence assets, with the support of corps' assets, must locate and track the tank regiment, as well as, enemy air defense assets so the artillery can suppress them. The aviation

brigade must coordinate with friendly air defense assets and the Air Force to ensure the safety of the attack helicopter battalions as they fly over friendly forces. Electronic warfare assets must detect enemy air defense radar emissions and the enemy tank regiment's command and control radio assets for electronic attack during the deep attack. As these units prepare for the division deep attack, they are also participating in the other ongoing battles and perhaps even supporting the deep attack of other enemy high payoff targets. It is important to remember the deep fight is not an isolated event.²⁷

When the DOCC locates the tank regiment and the commander approves the helicopter deep attack, the DOCC switches to the execution role. The DOCC alerts the attack helicopter battalion, makes final coordination, and at the appropriate time, begins to suppress enemy air defenses and command and control. The DOCC ensures attack of proper targets to guarantee the safety of the attack helicopter battalion as it moves in and out of enemy territory. Once the deep attack is complete, the DOCC assesses its results and determines if the tank regiment needs to be re-attacked to meet the commander's success criteria for the deep attack.

This description of a division deep attack sounds simple. However, it is a very complicated operation that requires a well-trained and rehearsed DOCC and subordinate elements accustomed to participating in the operation. Often, it is more difficult and cumbersome than it needs to be. The DOCC system also seems inadequate considering the Army's tenets of agility and initiative. That problem is the heart of the next chapter.

III. Initial Analysis

A fundamental weakness in the current division deep battle doctrine is the failure to maximize the tenets of initiative and agility. Three problems lead to this failure. First, division deep doctrine does not apply the concept of combined arms to deep operations. Second, the DOCC concept centralizes the synchronization and execution of the deep battle at too high a level. Finally, the division DOCC violates the principle of unity of command. Each of these problems affect the ability to use both agility and initiative in deep battle.

The first problem of division deep battle is found in the Army's fundamental doctrine of combined arms operations. FM 100-5 clearly states that the Army fights using combined arms.²⁸ Combined arms is;

The synchronized and/or simultaneous application of several arms, such as; infantry, armor, artillery, engineers, air defense, and aviation to achieve an effect on the enemy which is greater than if each arm was used against the enemy in sequence.²⁹

This definition does not seem to be a problem. The current DOCC doctrine of division deep attack does use combined arms. The DOCC ensures simultaneous application of several arms. However, there is a problem in the way the DOCC applies combined arms.

Army doctrine advocates the creation of task organized forces to conduct combined arms operations. Units of division size and larger include several arms so the unit is organically a combined

arms unit. Units below division size must task organize to achieve a combined arms capability. Task organization is;

A temporary grouping of forces designed to accomplish a particular mission. Task organization involves the ***distribution of available assets to subordinate control headquarters*** by attachment or by placing assets in direct support (DS) or under the operational control of the subordinate.³⁰ (emphasis added)

For example, in the close fight, divisions task organize units based on their mission. Divisions organize brigades with the proper mix of maneuver, artillery, intelligence, logistical, and other support assets necessary to accomplish a specified mission in the close battle.

This is where the deep attack doctrine fails. The combination of arms is at division level. There is no attempt to task organize for the deep attack or give required assets to a subordinate commander so he could accomplish the mission for the division. The DOCC conducts deep battle with pure, non-task organized units. For instance, attack aviation battalions usually do not have a direct support field artillery battalion. Instead, the DOCC controls the artillery suppression of enemy air defenses and provides fire support for the aviation unit.

Even more interesting is the inconsistency of this failing to task organize. Army doctrine places great emphasis on task organizing units from company to brigade for the close fight. One of the basic considerations of planning for the close fight is creating the proper task organization to accomplish the mission. Army organizations very seldom fight the close battle as a pure or non-task organized unit. In rear battle, the fight to secure the

friendly rear area, task organization is also a doctrinal requirement. Rear battle doctrine requires creating a tactical combat force (TCF) to defeat enemy forces in the Army's rear areas. FM 90-14, Rear Battle, states the TCF is a combined arms force, task organized to defeat the rear area threat.³¹ It appears doctrine is erratic in that both close and rear battle focus on task organization but deep battle does not.

There are several other doctrinal documents that clearly and plainly establish task organization as a key consideration for the deep battle. The first is FM 71-100, the same manual that illustrates the conduct of the division deep battle. FM 71-100 takes half a page to describe deep maneuver, which includes ground maneuver, air assault operations, airborne operations, and attack helicopter missions, and must be "...tailored according to the mission."³² In other words, task organization is a requirement. However, as stated earlier, the DOCC conducts deep battle and deep attack helicopter maneuver without task organizing subordinate units.

FM 90-4, Air Assault Operations also addresses task organization for deep battle. This manual lists air assaults as a form of deep operation or deep attack. FM 90-4 devotes an entire chapter to task organizing for the air assault. The air assault task force (AATF) forms around the infantry commander whose unit is being air lifted across enemy lines in the operation.³³

Clearly there is a disconnect in the Army's deep attack doctrine regarding combined arms and task organization. The DOCC still achieves the proper combination of arms at the decisive

point. However, this method of applying combined arms undercuts agility and initiative. Without task organization, subordinate units do not have all the assets they need and must seek any needed assistance from the DOCC. This slows the subordinate unit's decision making and response time and reduces their agility. It also slows the DOCC by adding to their workload. These slowdowns affect initiative by making the process sluggish and reducing the speed of action initiative and agility require.

Task organizing, in comparison, provides greater agility and reinforces initiative. Giving a subordinate commander the tools necessary for his mission allows him to execute the deep mission or shift assets without requesting and waiting for assistance from the DOCC. The task organized deep battle unit becomes more agile. In deep battle discussions, there is often concern about the need to reduce sensor to shooter links. This concern deals with the time it takes between sensing or locating a target and shooting it. The more links, or people and systems, in this chain between the observer and the weapon crewman, the longer it takes to engage the target. A short sensor to shooter chain is more agile and able to respond more rapidly. Task organization effectively removes links by placing both sensors and shooters in the same unit. The effect is greater speed and agility. A task organized unit can also resupply and plan new operations more rapidly because all necessary assets are immediately available to the unit commander. A deep battle unit, task organized with the necessary assets, would be more agile than the DOCC system.

Task organization also allows for greater initiative. Because the task organized unit is more agile, it is more likely

to retain the initiative in the deep battle. An agile task force can quickly gain the upper hand because it has the assets to respond faster than the enemy. Individual initiative is also more likely to be present in a task organized unit. It is easier to use initiative when a soldier has assets readily at hand. He has the means to solve the problem and can effect a solution himself. When the assets are not available, a soldier will not use his initiative because it appears there is nothing he can do. Task organization makes the assets more readily available to the individual. FM 90-4 places great emphasis on task organizing deep air assaults. It states the increased ability to use and gain initiative makes task organization of subordinate units the only way to ensure mission success.³⁴

Control of the deep battle is the second problem of current division doctrine. The division can control deep battle through a centralized or decentralized approach. Centralization is the control of all aspects of an operation in one headquarters. This can be beneficial in many instances. Over-centralization, on the other hand, is a problem. Over-centralization is the control of all aspects, including minor decision making, in one headquarters. All decisions, including ones subordinate commanders are capable of, are made in the over-centralized headquarters. This over-centralization slows decision making and reaction times, undermines agility and takes initiative away from subordinates.

Decentralization offers a better approach. Decentralized units push decision making to the lowest possible level. These units do not try to make all decisions in one headquarters. Rather, they make planning decisions at the senior headquarters

and allow subordinate units to make key decisions during execution of the mission. Decentralization is a key way to gain agility and maintain initiative. Allowing subordinate leaders to make key decisions quickly gives their units more speed, more freedom of action, and allows them to maintain the initiative. FM 90-4 supports decentralized operations. It states,

"The key to successful air assault C2 (command and control) lies in precise, centralized planning and aggressive, decentralized execution."³⁵

Martin Van Creveld, an author and noted military historian, correctly ties decentralization with task organization. He believes historical examples prove that military success requires task organized, low-level units that are allowed to make key decisions and have freedom of action.³⁶

A review of these principles clearly shows the DOCC is often over-centralized. This over-centralization is a result of doctrine and commanders' attempts to reduce the level of risk associated with deep maneuver. In most cases, the DOCC plans, coordinates, synchronizes, and executes the deep battle. It must make minor decisions because all coordination and synchronization occur there. Because there is no task organization, the DOCC also must make all execution decisions to ensure the proper combined arms effect on the target.

Unforeseen requirements for a deep battle decision may cause a delay in execution. Subordinate commanders must pass all the information needed to make the decision up to the DOCC. In a sense, it is very similar to adding extra links to the sensor to

shooter chain. This delay will undermine agility and initiative by placing the decision making at too high a level and causing delays. A lower level commander could make the same decision much faster. Over-centralization slows friendly forces and may allow the enemy to act faster and gain the initiative.

Field Manual 71-100-1 points out another problem with over-centralization in the DOCC. A companion manual to FM 71-100, it describes tactics, techniques, and procedures for the heavy division. The manual states the division main command post functions on data and subordinate unit information that is "historical in nature" and not suited for making accurate or timely tactical decisions. This results from the time it takes to pass information from subordinate units to the main command post.³⁷ For example, the division staff may believe an attack helicopter unit is prepared for a deep attack. In reality, the unit's status had probably changed by the time division received the initial report. There may have been maintenance failures or significant combat losses that prevent it from continuing its mission. Using this outdated and inaccurate friendly information, the DOCC will also make untimely and incorrect decisions. These untimely decisions strip away agility. Incorrect decisions may also sacrifice the initiative to the enemy.

The problem of centralized control was the impetus behind a recent Army study of corps level deep operations. The study attempted to find a solution to the problem of timeliness and correctness in executing corps deep operations. Unfortunately, the study focused on one system, the DOCC, and did not consider decentralizing decision making further. However, some interesting

information came from the study. The study found corps level processing of deep operations was too slow and resulted in inefficient deep operations. The DOCC concept improved the time line for both execution and planning by moving the decision making authority from the corps commander and his primary staff to the DOCC. The study's conclusion reinforced the need to move decision making to a lower level. It recommended the DOCC should fully integrate all deep assets into its operations and that the DOCC should have the authority to execute deep missions immediately.³⁸ In effect, the study recommended two major steps. First, it recommended task organizing the DOCC as the headquarters for the deep battle. Second, it decentralized authority to the DOCC.

However, the study also identified a significant problem with the DOCC that demonstrates decentralization did not go far enough. The study found that even in the period of most timely DOCC operations, 332 deep battle targets (33% of reported targets that met attack criteria) were not engaged because they were too old and likely had moved by the time they were processed. The processing of the targets and coordination of target attack through numerous DOCC staff elements caused the time delay.³⁹ This is a significant number of targets to escape destruction. It is safe to assume that if authority to attack those targets had been decentralized to some lower level, the number of escaping targets would have been much lower. A subordinate unit could have used its initiative and attacked some of these targets without waiting for DOCC approval.

This study supports decentralization, but also illuminates the potential of decentralizing even further. If the DOCC was

more successful than the main command post staff at executing the deep operations, then a subordinate unit may be even faster because fewer echelons of command are involved. This speed would provide greater agility. The increased agility and speed would produce more timely decisions and allow the subordinate unit to maintain the initiative.

The final failing of current Army deep battle doctrine is it fails to provide unity of command. According to doctrine, unity of command is a principle of war. Simply stated, unity of command is created by naming "...a single commander with the requisite authority to direct all forces in pursuit of a unified purpose."⁴⁰ Unity of command simplifies operations because all subordinate forces have one commander and are not distracted by numerous commanders with equal authority. Unity of command allows leaders to operate without conflict. This philosophy is key to the successful application of leadership in the deep battle.

The DOCC concept of deep attack does not place all deep battle forces under one commander. Although the DOCC substitutes for the commander, it is not the commander and can not make timely command decisions without the intervention of the division commander. This substitution of command slows the decision making process and threatens the timeliness and agility of deep attack operations. The organization of the DOCC may further exacerbate the problem. As stated earlier, the division DOCC includes many staff officers under the direction of the chief of staff. Two of the DOCC members, however, are commanders. In this situation, three individuals feel empowered to make decisions and command but no one person is really in command. This distraction only slows

decision making further and may take away the initiative of these leaders.

It is obvious that the commander must designate one commander of the deep battle. If the deep battle is centralized in the DOCC, one of the brigade commanders should be the deep battle commander. This designation would at least resolve the unity of command problem. However, a decentralized approach to deep battle using task organized units already solves the problem. A subordinate commander of a task organized unit is already exercising unity of command. In any event, unity of command is key to creating agile units that are capable of both demonstrating and maintaining initiative.

In summary, the current division deep battle doctrine fails to maximize the tenets of agility and initiative. This division doctrine would be more effective if it included combined arms task organization, decentralization, and establishment of unity of command. The next section offers a possible solution to the problem.

IV. Initial Summary

To overcome these previously noted failings, this monograph recommends forming task organized combined arms units to conduct division's deep attack. The division should form a deep attack combined arms task force for the deep battle mission and provide the task force commander with all the assets necessary to be successful in his mission. The deep battle task force commander would command the deep battle, or his part of it, to ensure unity

of command. The division would provide a specified mission and the division commander's intent and decentralize further planning and execution to the deep battle task force. This solution solves the problems of division deep battle doctrine by creating the possibility for greater initiative and agility.

Brigades are the optimum size for the deep battle task force. The structure of current Army divisions does not allow the formation of a deep attack task force below brigade level. Brigades have the requisite command and control and logistical capabilities to conduct deep attacks. This is true of any of the division's combat (aviation, division artillery, or maneuver) brigades. Below brigade level, battalions are too austere and require too many additional assets to complete the deep mission successfully.

The division commander would select the best base brigade, or brigades, for the deep attack mission and then carefully task organize for the mission. Task organization must create a unit with many of the intelligence and target acquisition capabilities of the current DOCC. Division must provide additional targeting intelligence and other support as needed.

Inherent in this concept is the requirement to train and rehearse the brigades carefully to accomplish the deep attack mission. Training must develop the ability to change task organization and plan new missions rapidly to support changes in the deep battle. This solution has promise of greater agility and initiative than the current doctrine. However, without proper training of the deep battle units, there will be no benefit to this new system. Only training and rehearsal will allow the deep

attack task force to be successful.

The next step is to review historical case studies to determine if the deep attack task force is a viable option.

V. Case Studies

History is the basis for all theory. This section examines several historical case studies to determine if history supports the paper's theory.

During World War I, several German officers were responsible for breaking the battlefield stalemate characteristic of the war. One of these was an artillery officer, Colonel Georg Bruchmüller. Many recognize Bruchmüller as the best artillery commander in the German army. He developed new tactics for artillery to support German breakthroughs of enemy lines. One of the key pieces of his new tactics was to task organize the artillery. Before Bruchmüller, the Germans grouped artillery units together based on weapon type. Bruchmüller grouped artillery together, regardless of weapon type, to accomplish specific missions.⁴²

In many ways, Bruchmüller believed in a system similar to this paper's recommendation. Bruchmüller created the first unit specifically tasked with deep battle. He called this unit the *fernkämpfartillerie* or FEKA. Their mission was to attack deep targets such as command and control, logistic sites, and reserves. He guaranteed unity of command by placing the FEKA under the control of the corps artillery commander and made the corps artillery commander responsible for deep battle. Bruchmüller's FEKA was the first example (1916) of task organizing for the deep

fight and proved to be one of the keys to the success of the new German tactics. He task organized the FEKA with a mixture of various long range artillery weapons, flash-ranging target acquisition sections, and its own aerial observation and balloon units.⁴³

Bruchmüller's new tactics were so successful the German high command placed him on special duty orders making him responsible for the fire support of all offensive operations for the remainder of the war. He moved from operation to operation and took charge of the artillery regardless of his rank or the size of the operation. The Germans recognized his great success by twice awarding Bruchmüller Germany's highest military decoration.⁴⁴ His success with the FEKA clearly shows the potential for task organization in the deep fight.

Bruchmüller, however, also believed in centralized control of the artillery and the FEKA. Bruchmüller centralized the German artillery on the eastern front in a time when his and other armies were relying on decentralized fire support. This clearly contradicts this paper's argument. He realized the importance of centralization in an army with inexperienced artillery officers, increasing problems with fratricide, inadequate technology, and the resulting inability of decentralized operations to provide adequate support for the attack.⁴⁵

After the war, Bruchmüller argued centralization worked because the conditions were right during the static phase of World War I. However, he further clarified his position on centralization. Bruchmüller did not believe centralization would

support mobile operations. He felt it was not agile enough to support anything other than static warfare.⁴⁶

During World War II a concept appeared in the Pacific campaign that seems to reinforce Bruchmüller's ideas on centralization. To manage fire support for amphibious operations, the Marines created the fire support coordination center (FSCC). The FSCC was an ad hoc organization that centralized coordination of close air support, artillery fires, and naval gunfire.⁴⁷ Although the FSCC coordinated fires for the close fight, there are enough similarities to the DOCC for a useful comparison.

The FSCC, like the DOCC, included staff personnel from various fire support units. It was a permanent fire support cell which eventually included representatives from the field artillery units, supporting aviation and Air Force units, mortar platoons, and naval gunfire vessels. The FSCC answered to the commander and was responsible for all fire support. The FSCC planned, coordinated, and matched targets to the proper fire support weapon system for attack. The FSCC did this according to the commander's plan. When led properly, the FSCC worked well and provided responsive fires for the requested target. It managed airspace effectively, ensuring friendly aircraft were not shot down by friendly artillery. The FSCC was also very effective at suppressing enemy air defense weapons. In these ways, the FSCC was very similar to the current DOCC and performed the same centralized functions.⁴⁸

The FSCC also had numerous problems. The first problem revolved around the FSCC's leadership. When the leader was weak

or inefficient, the FSCC was nothing more than a standing committee which was incapable of making correct or timely decisions. Second, the FSCC often was incapable of planning in heavy combat. It became too tied down to attacking targets, was quickly overwhelmed by the sheer number of targets, and had no time for planning. Third, the FSCC usually had inaccurate information about friendly fire support units because it was so far removed from the battlefield. Finally, the FSCC worked well in slow-moving or static warfare during island assaults or in the last phase of the Korean War. However, it failed miserably during more mobile and rapid operations because it was too slow to keep up with the pace of the battle.⁴⁹

Although this second case study does not reinforce the merits of this paper's recommendation, it clearly shows the potential problems of over-centralization. The list of FSCC problems reflects the weaknesses of the DOCC. Like the DOCC, the FSCC lacked unity of command and only functioned well when a strong leader took charge. The FSCC was over-centralized and lost its agility when the demands of heavy combat overwhelmed its capabilities. Finally, with this loss of agility, the FSCC could not plan for upcoming operations. Without planning a unit is incapable of maintaining the initiative.

While these case studies from actual combat reflect the problems of the DOCC concept, perhaps they are too dated to be accurate assessments of the recommendation. Technology and warfare have changed since the Korean War and World War I. The Army has a program that provides more recent case studies from computer simulations. The US Army created the Battle Command

Training Program (BCTP) to train division and corps commanders and staff. Using an integrated computer simulation, each division or corps can conduct simulated combat operations against a modern, well-trained enemy. A group of professional evaluators observe these exercises, record events, conduct after action reviews, and help train the units. These BCTP observers use doctrine as their guide and evaluate the units on their application of the current doctrine. Divisions conduct a BCTP exercise, called Warfighter, every other year. The exercises are stressful and accurately replicate combat. The Army believes the BCTP program is the best way to train its divisions and corps commanders and staffs for combat because of the realistic, fluid, and stressful environment it provides.

The 1st Armored Division (1st AD) conducted Warfighters in 1992 and 1994. In many respects, the division used the same procedures and organizations for both operations. The key difference in the Warfighters was the use of a DOCC. In 1992, 1st AD conducted deep battle with task organized units and no DOCC. Two years later, the division participated in another Warfighter with deep operations under control of a DOCC. The results of both deep battles, or lack thereof, are instructive.⁵⁰

In 1992, 1st AD task organized several units for deep battle. The first was the division artillery's Artillery Combat Team (ACT). This task organized unit conducted deep fires to attack targets and provided some SEAD for attack helicopter deep attacks. The ACT's primary mission was to destroy the enemy's long range artillery, delay the enemy advance, and suppress enemy air defense systems. The division artillery commander commanded the ACT from

the division artillery assault command post. The task organization included; a 155mm howitzer battalion, a multiple launch rocket system (MLRS) battalion, an infantry company, an air defense stinger platoon, an engineer platoon, target acquisition radars, and military intelligence radio intercept and jamming platoons. 1st AD organized the ACT not only to conduct deep battle but also to protect itself because the mission required positioning forward of friendly lines.⁵¹

The other task organizations for deep battle were in the aviation brigade. 1st AD task organized its attack helicopter battalions to conduct deep attack. Normally, the division gave the mission of deep attack to the aviation brigade commander and provided him assets to task organize his attack helicopter battalions. For example, the aviation brigade planned and then conducted a deep attack with the 3-227th Attack Helicopter Battalion (AHB). The brigade task organized and gave 3-227th AHB a direct support artillery battalion, reinforcing artillery battalions, and six close air support sorties of Air Force A-10s.⁵²

Using this system, 1st AD gave the necessary assets to the division artillery and aviation brigades to create the task organized units. Division provided guidance, synchronized the deep with the close and rear battles, and assigned specific deep attack missions to these task organized units for planning and execution.

It is important to measure the success of 1st AD's deep attack in 1992. Although numbers can be misleading, success involves the number of enemy vehicles or units destroyed. This

paper also measures success against mission achievement. Did the unit achieve the objective assigned by the division commander? Determination of success will also rely on the comments of the BCTP staff.

In 1992, BCTP said the 1st AD's deep battle was successful because it achieved the commander's intent. 1st AD conducted 6 separate deep attack missions during the Warfighter exercise. The aviation brigade conducted five and the ACT the other. During these deep attacks, the division lost three attack helicopters and four supporting Air Force A-10s. In exchange, the division destroyed 43 tanks, 93 howitzers, 52 air defense weapons, 30 rocket launchers, 80 anti-tank weapons, and 497 other combat vehicles. Although these numbers are eye-catching, the numbers involved in the individual missions are more important to this paper.⁵³

The individual deep attack missions also show the effectiveness of task organizing for deep attack. During their exercise, the division did not task organize once. The 2-227th AHB conducted a deep attack as a pure attack helicopter battalion without any combat systems other than their AH-64 attack helicopters. Although the battalion managed to destroy 7 air defense weapons and 5 howitzers, the commander aborted the mission when he could not penetrate the enemy air defense coverage. This aborted mission cost the division two attack helicopters and was a failure. BCTP observers recorded the division failed to suppress any enemy air defenses. A single enemy air defense weapon, whose location was known to the division, destroyed the two helicopters. Without a means for the 2-227th AHB battalion commander to

suppress or destroy the enemy air defense coverage, he had to abort the mission. In effect, the enemy air defense had the initiative. 2-227th AHB was not task organized or agile enough to overcome the air defenses. At a minimum, a supporting artillery unit could have provided agility through responsive fires to suppress the enemy systems.⁵⁴

In contrast, the most highly developed and most agile task organized unit had the greatest success in the 1st AD deep battle. The ACT was highly successful and achieved all its assigned objectives. It destroyed 50 howitzers, 80 anti-tank weapons, 26 air defense systems, and 110 combat vehicles. The ACT destroyed approximately 42 percent of the numbers attributed to the division's deep battle. It also delayed the enemy's arrival by 18 hours and gained valuable time for the division to reorganize for the attack.⁵⁵

The BCTP observers found six problems with 1st AD's 1992 deep battle. First, the deep battle, in many cases, was poorly planned and executed. Second, the task organization of the aviation brigade units did not provide enough assets to support the mission. Specifically, military intelligence and target acquisitions assets were inadequate. Third, in one instance, suppression of enemy air defense was inadequate. Fourth, the aviation brigade often suffered from inadequate planning time. Division did not manage their time effectively. Fifth, deep battle units had limited or inaccurate intelligence available. This non-availability was a result of the inadequate task organization of military intelligence assets and poor support from division. Finally, the aviation brigade had a poor understanding

of the coordination required for aviation deep attack.⁵⁶ With one exception, these problems are problems of inadequate training. The one exception to this lack of training is the task organization problem. The BCTP observers believed the division did not provide enough to the aviation brigade.

The 1992 deep battle was successful because of decentralized task organization and with training could have been even better. It is a clear example of the proper way to conduct deep battle and readily supports this paper's argument. The next example shows a different result.

In 1994, 1st AD went back to BCTP and the Warfighter exercise with a DOCC. The division, however, kept the ACT concept. This concept of a DOCC using a task organized deep battle unit provides some valuable insights.

In 1994, BCTP observers determined 1st AD's deep battle was only marginally successful. In reality, deep battle achieved even less. The division conducted three aviation deep attack missions to destroy the enemy's long range artillery. The BCTP observers did not completely record the results of these deep attacks. The recorded results report the destruction of 6 tanks, 41 howitzers, 17 rocket launchers, 3 surface to surface missiles, 39 air defense weapons, and 111 trucks. However, the friendly losses were six AH-64s for this mission. Altogether, the division lost 9 AH-64s in the deep battle, an average of three per mission. In comparison, the average was less than one per mission in 1992. In addition, deep battle did not achieve its stated goals. The deep battle objective was to destroy the enemy long range artillery. According to BCTP, the division failed to destroy enough artillery

systems to accomplish this task. When BCTP observers compared the total friendly losses to enemy losses, they stated the deep battle results were not satisfactory and the cost too high. In 1994, 1st AD lost **one** AH-64 for every **35** enemy systems. Compared to 1992, when the rate was **one** AH-64 for every **176** enemy systems, 1994's results were disappointing.⁵⁷

The problems 1st AD encountered in 1994 were the direct result of their organization for deep battle and its inherent loss of agility and initiative. The DOCC practiced the new doctrine of centralized control of deep battle. The division used the ACT again in almost the exact configuration of the '92 Warfighter. However, instead of giving the ACT a unique deep mission to execute, the DOCC determined when and where the ACT would fire. In addition, the division also failed to task organize the attack helicopter battalions for the deep attack. Instead, the aviation unit requested fire support from the ACT through the DOCC. These changes limited the division's agility.⁵⁸

In 1992, the division's ACT was amazingly successful at achieving its mission. In 1994, the DOCC system limited the effectiveness of the ACT's deep fires. It required centralized planning, coordination, and execution of all deep attacks including deep artillery fires from the ACT. BCTP noted a failure of the DOCC in coordination and execution. Of the 27 deep fire missions received at the DOCC on one day, it did not process or fire any of them. It appears the DOCC's staff entered the targets into the duty log and forgot them. Of these, 24 were accurate locations of enemy air defense weapons and the division commander's second priority for deep attack. That night the

division lost six AH-64 helicopters during a deep attack.⁵⁹

This last case is a great example of the failure of over-centralization and no task organization. In 1992, the division was successful because the task organized deep battle units could rely on their own assets to provide fire support or target acquisition. When problems arose, these agile units usually had the means immediately available to overcome the danger. In 1992, the ACT could have exercised initiative and attacked the 24 air defense targets when they acquired them. In 1994, the ACT did not even get a chance to engage detected air defense targets because an over-centralized DOCC failed to send the fire missions to the ACT. In addition, the aviation units had to request fire support through the DOCC and the aviation brigade. The combination of over-centralization and no task organization resulted in aviation units that were not agile and lost more aircraft in deep battle.

The BCTP observers reported four major problems with the 1st AD DOCC in 1994. First, both the division artillery commander and the aviation brigade commander chaired the DOCC. The chief of staff chaired the targeting meeting. There was no unity of command in the DOCC because three people had leadership responsibilities in the deep battle. Second, the DOCC canceled most of the planned deep attacks at the last minute because coordination was incomplete or more time was needed. Third, the DOCC could not obtain precise intelligence and track enemy targets. Finally, the DOCC was ineffective at planning and executing the suppression of enemy air defenses.⁶⁰

One could argue most of these problems are the result of inadequate training just like the problems of the '92 deep battle.

In fact, they were a problem of insufficient training. Clearly, the '94 DOCC was unprepared for Warfighter. The DOCC doctrine itself was new to the Army and 1st AD was still learning.

All of these are valid points. However, inadequate training limited both the '92 and '94 Warfighters. Given this poor training, the task organized approach to deep battle, used in 1992, was more effective than the DOCC approach. The 1992 deep battle was successful because subordinate commanders had the necessary assets to perform their mission and could make timely and accurate decisions. Agile units could quickly overcome training problems and maintain the initiative. In 1994, an over-centralized and untrained DOCC restricted agility and initiative and performed poorly.

These case studies demonstrate the possibilities of the decentralized task organized approach to deep battle. At the same time, the weakness of the DOCC approach is evident. In the 1st Armored Division study, given the same unit, circumstances, and a similar operation, the decentralized task organized approach was more efficient than the doctrinal DOCC system. The example of the FSCC also shows the weakness of an over-centralized approach. The Bruchmüller case study demonstrates the strength in task organizing specific units for deep attack. Finally, Bruchmüller also recorded the centralized approach would not work in mobile warfare.

The division should task organize specific units to conduct deep battle. These deep battle task forces should receive all the assets necessary to accomplish their deep mission successfully. Divisions should select the proper units based on the objective

and nature of the deep attack. As seen in the Bruchmüller and 1st AD 1992 case studies, these deep battle task forces bring agility and initiative to the deep battle.

A division deep battle planning cell (possibly the DOCC) conducts some centralized planning to determine the proper task organization for the deep attack, provide the necessary assets, determine the specific mission of the deep attack task force, and provide the division commander's intent. Decentralized execution at the deep battle task force allows the deep task force to acquire the target, determine the best way to attack it, synchronize the attack, coordinate with adjacent friendly units, and conduct the attack at the best possible time under the best possible conditions. The FSCC and 1st AD 1994 case studies show the cost in agility and initiative of over-centralization. The example of 1st AD in 1992, on the other hand, shows the potential for this method.

VI. Conclusions

The fact that, historically speaking, those armies have been most successful which did not turn their troops into automatons, did not attempt to control everything from the top, and allowed subordinate commanders considerable latitude has been abundantly demonstrated.

- Martin Van Creveld

Current division deep battle doctrine does not align itself with the Army tenets. More specifically, it conflicts with the tenets of initiative and agility. There are three factors that lead to this contradiction. First, division deep battle does not task organize. Second, current doctrine over-centralizes

execution and planning in the DOCC. Finally, current deep battle doctrine violates the principle of war of unity of command.

Current deep attack doctrine places execution in a coordination cell (the DOCC) and removes the commander from the deep battle.

The Army needs new division deep battle doctrine. This new doctrine is one of decentralized execution by combined arms task forces. Division should provide mission, intent, and broad guidance to task organized subordinate units. Mission drives the organization of the subordinate unit. For certain missions, the division artillery will be the base unit. In others, maneuver or attack helicopter brigades would form the majority of the deep battle task force.

The future holds many opportunities for division deep battle. Weapon ranges and precision will continue to increase giving the division a longer reach with greater accuracy. Advancements like the Apache Longbow attack helicopter and brilliant anti-armor munitions are already beginning to affect Army doctrine and bringing greater agility to small units. While advancements in firepower are important, the major changes will come in intelligence gathering and target acquisition. Digitized command and control systems are already making it possible for near instantaneous transmission of targeting intelligence and mission orders. These new systems will allow units at all levels to share a common view of the battlefield by providing the same information to all units. The combination of increased firepower lethality and range, better intelligence, and digitized command and control may make the deep battle decisive. In other words, the Army could defeat the enemy's tactical formations before gaining physical

contact with them.⁶¹

These changes will affect the conduct of deep battle. Technology will lead to smaller and more agile units. Task organization of these new units with future intelligence assets could multiply their agility. As more units gain a deep capability through increased weapons ranges, there will be a greater need for decentralization. Division headquarters will simply be incapable of centralized execution of so many deep battle assets. Finally, decentralization will be more feasible because a shared common view of the battlefield will allow units to coordinate the deep battle without division's assistance.

This decentralized use of deep battle task forces is the best concept for deep attack, now and in the future. The Army must change division doctrine to reflect this concept.

ENDNOTES

1. Department of the Army, Field Manual 100-5, Operations (Washington, DC: Department of the Army, 1993), v.
2. Ibid., 1-1.
3. Ibid., 2-6 to 2-8.
4. Ibid., 2-7.
5. Ibid., 2-7 to 2-8.
6. Ibid., 2-8 to 2-9.
7. Ibid., 2-9.
8. Ibid., 6-13 to 6-15.
9. Ibid.
10. Ibid., 6-14 and 2-11.
11. Richard E. Simpkin, Deep Battle: the Brainchild of Marshall Tukhachevskii (London: Brassey's Defense Publishers, 1987) ix-xi.
12. Simpkin Deep Battle, 32-33, 197 and Richard E. Simpkin, Race to the Swift (London: Brassey's Defense Publishers, 1985) 37, 38-39.
13. Simpkin, Deep Battle, 37; Simpkin, Race to the Swift, 38.
14. Simpkin, Deep Battle, 38-39, 141-142.
15. Ibid., 170.
16. Bernard Rogers, "'Strike Deep': a New Concept for NATO." Military Technology May 1983, 38-39.
17. Donn A. Starry, "Extending the Battlefield." Military Review March 1981, 33, 47-48.
18. F. M. von Senger und Etterlien and Walter H. Yates. "New

Operational Dimensions." RUSI Journal 2 June 1983, 12.; Rogers, "Strike Deep," 39; Starry, "Extending the Battlefield," 37; Simpkin, Race to the Swift, 50.

19. Starry, "Extending the Battlefield," 37-38; Rogers, "Deep Strike," 42.

20. Starry, "Extending the Battlefield," 46, 38-41, 47-48, Rogers, "Deep Strike," 45, 47.

21. Field Manual 100-5, 2-7 to 2-8, 6-14, 7-13, 9-4.

22. Department of the Army, Field Manual 71-100 (Washington, DC: Department of the Army, 1994), 4-7.

23. Ibid., 2-14, 5-4.

24. Ibid., 2-14, 3-7.

25. Ibid., 2-12 to 2-13; see also Thomas E. Culling, Daniel A. Nolan III, and Mark W. Jones, "Hell Fires Deep: The DOC - an Integrated Approach." Field Artillery February 1995, 14-19; Henry Stratman and Jackson L. Flake III, "Winning Early, Winning Deep." Field Artillery June 1995, 31-35.

26. Field Manual 71-100, 2-11 to 2-14 and Battle Command Training Program, Targeting and Deep Operations Briefing, 3 December, 1996, (lists execution of deep battle as one of the DOCC's key functions).

27. Ibid., 2-12 (Deep operations and simultaneity).

28. Field Manual 100-5, 2-3.

29. Department of the Army, Field Manual 101-5-1, Operational Terms and Graphics. (Washington, DC: Department of the Army, 1995), 1-57.

30. Ibid., 1-261.

31. Department of the Army, Field Manual 90-14, Rear

Battle. (Washington, DC: Department of the Army, 1985), 3-28.

32. Field Manual 71-100, 2-13.

33. Department of the Army, Field Manual 90-4, Air Assault Operations. (Washington, DC: Department of the Army, 1987), 2-3 to 2-10.

34. Ibid.

35. Ibid., 2-10.

36. Martin Van Creveld, Command in War. (Cambridge, Massachusetts: Harvard University Press, 1985), 270.

37. Department of the Army, Field Manual 71-100-1, Armor/Mechanized Division Tactics, Technics, and Procedures (Washington, DC: Department of the Army, 1991), 2-33 and 2-54.

38. TRADOC Analysis Center, Deep Operations Coordination Cell (DOCC) Analysis (Final Report). Technical Report TRAC-TR-1394. (Fort Leavenworth, KS: TRADOC Analysis Center, November 1994), ES -1 to ES -7.

39. Ibid.

40. Field Manual 100-5, 2-5.

41. David T. Zabecki, Steel Wind (Westport, CT: Praeger Publishers, 1994), 33-50.

42. Zabecki, Steel Wind, 37, 41-42; Bruce I. Gudmunson, On Artillery (Westport, CT: Praeger Publishers, 1993), 89-90.

43. Zabecki, Steel Wind, 29.

44. Ibid., 37 and 107.

45. Ibid.

46. Gudmunson, On Artillery, 148.

47. Ibid., 148. Gudmunson offers the FSCC during the Khe Sanh siege as an example of an FSCC that worked well.

48. Ibid., 148-149.
49. Battle Command Training Program, Final Evaluation Report 9203 (Fort Leavenworth, KS: Battle Command Training Program, 1992); Battle Command Training Program. Final Evaluation Report 9404 (Fort Leavenworth, KS: Battle Command Training Program, 1994).
50. Rex L. Gilbert, "The Artillery Combat Team: Providing Versatility for America's Tank Division," Field Artillery, April 1993, 32-34.
51. BCTP, Final Evaluation Report 9203 [computer database] 29, 125.
52. Ibid., 16, 70, 73, 85, 125, 129.
53. Ibid., 33, 129.
54. BCTP, Final Evaluation Report 9203 [computer database] 73; Gilbert, "The Artillery Combat Team," 34.
55. BCTP, Final Evaluation Report 9203 [computer database] 29-33.
56. Ibid.
57. BCTP, Final Evaluation Report 9404 [computer database] 80-81, 131-132.
58. Ibid., 9, 102, 131.
59. Ibid., 81, 98.
60. Ibid., 34, 81, 98, 99, 131, 132.
61. Future of warfare information from, TRADOC Pamphlet 525-5, Force XXI Operations, US Army Training and Doctrine Command, 1 August 1994; Gordon R. Sullivan and James M. Dubik, "Land Warfare in the 21st Century," Military Review. September 1993, 13-32; Brian Nichiporuk and Carl H. Builder. Information Technologies and

the Future of Land Warfare (Santa Monica, CA: Rand Corporation, 1995); Donald L. W. Kerr, "Depth and Simultaneous Attack - One Battle Lab Helping to Forge the Army's Future," Field Artillery. April 1993, 35-38; Glenn K. Otis, "Ascendancy of Fires: The Evolution of the Combined Arms Team," Field Artillery, June 1995, 18-19; For an example of future maneuver deep battle see James K. Morningstar, "Back to the Future: Javelins and Skirmishers on the Battlefield," Armor. May-June 1996, 37-40. For future Army capabilities see United States Army Association, Army Green Book 1996-97, 237-314; Randall L. Rigby, "The Changing Face of Ground Warfare-Fires First," Field Artillery. July-August 1996, 1.

Bibliography

Books

- Gudmunson, Bruce I. On Artillery. Westport, CT: Praeger Publishers, 1993.
- House, Jonathan M. Toward Combined Arms Warfare. Fort Leavenworth, KS: Combat Studies Institute, 1984.
- Nichiporuk, Brian and Carl H. Builder. Information Technologies and the Future of Land Warfare. Santa Monica, CA: Rand Corporation, 1995.
- Simpkin, Richard E. Deep Battle: the Brainchild of Marshall Tukhachevskii. London: Brassey's Defense Publishers, 1987.
- _____. Race to the Swift: Thoughts on Twenty First Century Warfare. London: Brassey's Defense Publishers, 1985.
- Van Creveld, Martin. Command in War. Cambridge, Massachusetts: Harvard University Press, 1985.
- Zabecki, David T. Steel Wind. Westport, CT: Praeger Publishers, 1994.

Manuals

- Department of the Army. Field Manual 1-100, Army Aviation in Combat Operations. Washington, DC: Department of the Army, 1989.
- Department of the Army. Field Manual 1-111, Aviation Brigades. Washington, DC: Department of the Army, 1990.
- Department of the Army. Field Manual 1-111, Aviation Brigades (initial draft). Washington, DC: Department of the Army, 1996.
- Department of the Army. Field Manual 6-20-10, The Targeting Process. Washington, DC: Department of the Army, 1996.
- Department of the Army. Field Manual 71-100, Division Operations. Washington, DC: Department of the Army, 1995.
- Department of the Army. Field Manual 71-100-1, Armor/Mechanized Division Tactics, Technics, and Procedures. Washington, DC: Department of the Army, 1991.
- Department of the Army. Field Manual 71-100-2, Infantry Division Tactics, Technics, and Procedures. Washington, DC: Department of the Army, 1993.

Department of the Army. Field Manual 90-4, Air Assault Operations.
Washington, DC: Department of the Army, 1987.

Department of the Army. Field Manual, 90-14 Rear Battle.
Washington, DC: Department of the Army, 1985.

Department of the Army. Field Manual 100-5, Operations.
Washington, DC: Department of the Army, 1993.

Department of the Army. Field Manual 100-15, Corps Operations.
Washington, DC: Department of the Army, 1996.

Department of the Army. Field Manual 100-15-1, Corps Operations, Tactics, Techniques, and Procedures (Initial Draft).
Washington, DC: Department of the Army, 1996.

Department of the Army. Field Manual 101-5-1, Operational Terms and Graphics. Washington, DC: Department of the Army, 1995.

Department of the Army. TRADOC Pamphlet 525-5, Force XXI Operations. US Army Training and Doctrine Command, 1 August 1994.

US Army Field Artillery School, Tactics, Techniques and Procedures for Planning and Executing the Deep Fight. Fort Sill, OK: Fire Support and Combined Arms Operations Department, September, 1993.

Theses and Reports

Bush, Charles C. The Role of the Division Deep Operations Cell in Force Projection Operations. MMAS Thesis, US Army Command and General Staff College, Fort Leavenworth, KS, 1995.

Corpac, Peter. Airland Battle Future: Fires, How do You do It?. Naval War College, Newport, RI, 1991.

Jacobs, William M. Massing the Third Dimension in Air Land Battle - Future: The Aviation Division. School of Advanced Military Studies, Fort Leavenworth, KS, 1990.

Jauron, L.C. Corps Aviation Brigade Deep Operations: Toward a Sharper Spear. School of Advanced Military Studies, Fort Leavenworth, KS, 1993.

Monko, Joseph P. Jr. Doctrinal Shortfall - Who Will Command the Deep Battle. US Army War College Military Studies Program, Carlisle Barracks, PA, 1988.

Pickar, Charles K. Tactical Deep Battle. School of Advanced

Military Studies, Fort Leavenworth, KS, 1991.

Simmons, J.M. Optimizing Attack Aviation Battle Command in Deep Operations. School of Advanced Military Studies, Fort Leavenworth, KS, 1993.

Articles

Cannon, Michael W. "The Division Deep-Battle Targeting Cell: Thor's Hammer or Rube Goldberg Device?" Field Artillery. April 1991, 44-49.

Culling, Thomas E., Daniel A. Nolan III, and Mark W. Jones. "Hell Fires Deep: The DOC - an Integrated Approach." Field Artillery, February 1995, 14-19.

Gilbert, Rex L. "The Artillery Combat Team: Providing Versatility for America's Tank Division." Field Artillery. April 1993, 32-34.

Haynes III, Forest D. "Synchronizing the Division Deep Fight." Field Artillery. April, 1993, 21-25.

Hill, Jerry C. "Beyond Doctrine: Pushing the Envelope with MLRS." Field Artillery. August 1994, 40-43.

Hughes, Edward L. "MLRS Doctrine and TTP - Getting it Right." Field Artillery. February 1995, 2-3.

Kerr, Donald L. W. "Depth and Simultaneous Attack - One Battle Lab Helping to Forge the Army's Future." Field Artillery. April 1993, 35-38.

McCabe, Thomas R. "The Limits of Deep Attack." Airpower Journal. Fall 1993, 4-13.

Morningstar, James K. "Back to the Future: Javelins and Skirmishers on the Battlefield." Armor. May-June 1996, 37-40.

Otis, Glenn K. "Ascendancy of Fires: The Evolution of the Combined Arms Team." Field Artillery. June 1995, 18-19.

Rigby, Randall L. "The Changing Face of Ground Warfare-Fires First." Field Artillery. July-August 1996, 1.

Rogers, Bernard. "'Strike Deep': a New Concept for NATO." Military Technology. May 1983, 38-50.

Starry, Donn A. "Extending the Battlefield." Military Review. March 1981, 31-50.

Stratman, Henry, and Jackson L. Flake III. "Winning Early, Winning

Deep." Field Artillery. June 1995, 31-35.

Sullivan, Gordon R. and James M. Dubik. "Land Warfare in the 21st Century." Military Review. September, 1993, 13-32.

von Senger und Etterlien, F.M. and Walter H. Yates. "New Operational Dimensions." RUSI Journal. 2 June 1983, 12.

Other Sources

1st Armored Division. "Annex D (Fire Support) to 1 AD OPLAN 95-135 (Proud Lion)." 20 April 1995.

2nd Armored Division. Deep Operations SOP. COL Ralph R. Ripley, Chief of Staff.

3rd Infantry Division. Deep Operations SOP. LTC Craig B. Wheldon, Assistant Chief of Staff, G3, December, 1992.

Battle Command Training Program. Targeting and Deep Operations Briefing. Fort Leavenworth, KS: Battle Command Training Program, 3 December, 1996.

Battle Command Training Program. Final Evaluation Report 9203. Fort Leavenworth, KS: Battle Command Training Program, 1992.

Battle Command Training Program. Final Evaluation Report 9304. Fort Leavenworth, KS: Battle Command Training Program, 1993.

Battle Command Training Program. Final Evaluation Report 9404. Fort Leavenworth, KS: Battle Command Training Program, 1994.

Battle Command Training Program. Final Evaluation Report 9504. Fort Leavenworth, KS: Battle Command Training Program, 1995.

Center for Army Lessons Learned. Combat Training Centers Bulletin No. 94-1. Fort Leavenworth, KS: Center for Army Lessons Learned, March 1994.

TRADOC Analysis Center. Deep Operations Coordination Cell (DOCC) Analysis (Final Report). Technical Report TRAC-TR-1394. Fort Leavenworth, KS: TRADOC Analysis Center, November 1994.

United States Army Association. Army Green Book 1996-97. USAA, 1996.

V (US) Corps. Field Standing Operating Procedures: Deep Operations Annex. April, 1995.